

# SECTION A

## STATE WATER PLAN - JORDAN RIVER BASIN

# ACRONYMS, ABBREVIATIONS AND DEFINITIONS

### A.1 Acronyms and Abbreviations

Many names, titles, programs, organizations, legislative acts, measurements and activities are abbreviated to reduce the volume of words and to simplify communications. A few of the abbreviations and acronyms used in the Jordan River Basin Plan are listed below.

#### A.1.1 State and Local Agencies and Organizations

|       |  |
|-------|--|
| CEM   | Division of Comprehensive Emergency Management |
| CUWCD | Central Utah Water Conservancy District        |
| DWQ   | Division of Water Quality                      |
| MCD   | Multi-County Planning District                 |
| SDCO  | State Disaster Coordinating Office             |
| SHMT  | State Hazard Mitigation Team                   |
| UWQB  | Utah Water Quality Board                       |

#### A.1.2 Federal Agencies

|      |   |
|------|---|
| BLM  | Bureau of Land Management               |
| COE  | Corps of Engineers                      |
| EPA  | Environmental Protection Agency         |
| FSA  | Farm Service Agency                     |
| FEMA | Federal Emergency Management Agency     |
| FERC | Federal Energy Regulatory Commission    |
| FWS  | Fish and Wildlife Service               |
| NRCS | Natural Resources Conservation Service  |
| USDA | United States Department of Agriculture |
| USGS | Geological Survey                       |

#### A.1.3 Programs/Acts

|        |   |
|--------|---|
| ACP    | Agricultural Conservation Program                                       |
| CERCLA | Comprehensive Environmental Response and<br>Comprehensive Liability Act |
| CFR    | Code of Federal Regulations   |
| CRP    | Conservation Reserve Program  |
| CUP    | Central Utah Project  |
| CUPCA  | Central Utah Project Completion Act                                     |
| CWA    | Clean Water Act   |
| DWSPR  | Drinking Water Source Protection Rule                                   |
| ESA    | Endangered Species Act  |
| ECP    | Emergency Conservation Program  |
| NAWQA  | National Water Quality Assessment                                       |
| NFIP   | National Flood Insurance Program  |
| NPDES  | National Pollution Discharge Elimination System                         |
| RPDWS  | Rules for Public Drinking Water Systems                                 |

|       |   |
|-------|---|
| SCORP | State Comprehensive Outdoor Recreation Plan |
| SDWA  | Safe Drinking Water Act                     |
| UPDES | Utah Pollution Discharge Elimination System |
| USDWA | Utah Safe Drinking Water Act                |
| UWPCA | Utah Water Pollution Control Act            |
| UWQA  | Utah Water Quality Act                      |

#### **A.1.4 Measurements**

|          |                                     |
|----------|-------------------------------------|
| Ac-Ft    | Acre-feet                           |
| CFS(cfs) | Cubic Feet Per Second               |
| GPCD     | Gallons Per Capita Day              |
| gpm      | Gallons per minute                  |
| MCL      | Maximum Contaminant Level           |
| mgd      | Million Gallons Per Day             |
| mg/l     | Milligrams Per Liter                |
| mw       | Megawatt                            |
| PMP      | Probable Maximum Precipitation      |
| SMCL     | Secondary Maximum Contaminant Level |
| TDS      | Total Dissolved Solids              |

#### **A.1.5 Miscellaneous**

|       |   |
|-------|---|
| EAP   | Emergency Action Plan                               |
| EOP   | Emergency Operations Plan                           |
| FIRE  | Finance, Insurance and Real Estate                  |
| I&D   | Irrigation and Drainage                             |
| M&I   | Municipal and Industrial                            |
| OHV   | Off-Highway Vehicle                                 |
| RC&D  | Resource Conservation and Development               |
| RMP   | Resource Management Plan                            |
| SFN   | Spanish Fork/Nephi                                  |
| TCPU  | Transportation, Communications and Public Utilities |
| WCWEP | Wasatch County Water Efficiency Program             |
| WFCM  | Wasatch Front Water Demand/Supply Computer Model    |
| WWTP  | Wastewater Treatment Plant                          |

## **A.2 Water Resource Definitions**

Many terms used in the water business have different meanings depending on the source, and are sometimes confusing. Some words are used interchangeably. A few commonly used water terms are defined for use in this document.

### **A.2.1 Water Use Terms**

Water is often said to be "used" when it is diverted, withdrawn, depleted, or consumed. But it is also "used" in place for such things as fish and wildlife habitat, recreation and hydropower production.

**Commercial Use** - Uses normally associated with small business operations which may include drinking water, food preparation, personal sanitation, facility cleaning and maintenance, and irrigation of landscapes.

**Consumptive Use** - Consumption of water for residential, commercial, institutional industrial, agricultural, power generation and recreational purposes. Naturally occurring vegetation and wildlife also consumptively use water. Water consumed is not available for other uses within the system.

**Cropland Irrigation Use** - Water used for irrigation of cropland. Residential lawn and garden uses are not included.

**Depletion** - Water lost or made unavailable for return to a given designated area, river system or basin. It is intended to represent the net loss to a system. The terms consumption and depletion are often used interchangeably but are not the same. For example, water exported from a basin is a loss or depletion to that system as it is not consumed within the basin.

Water diverted to irrigated crops in a given system, but not returned for later use, is depletion. Precipitation that falls on irrigated crops is not considered a part of the supply like surface water and groundwater diversions. For this reason, precipitation falling on and consumed by irrigated crops is not considered as being a depletion to the system.

**Diversion/Withdrawal** - Water diverted or withdrawn from supply sources such as streams, lakes, reservoirs, springs or wells for a variety of uses including cropland irrigation and residential, commercial, institutional, and industrial purposes. The terms diversion and withdrawal are often used interchangeably.

**Industrial Use** - Use associated with the manufacturing or assembly of products which may include the same basic uses as commercial business. However, the volume of water used by industrial businesses can be considerably greater than water use by commercial businesses.

**Institutional Use** - Uses normally associated with general operation of various public agencies and institutions including drinking water; personal sanitation; facility cleaning and maintenance; and irrigation of parks, cemeteries, play grounds, recreational areas and other facilities.

**Municipal Use** - This term is commonly used to include residential, commercial and institutional. It is sometimes used interchangeably with the term "public water use."

**Municipal and Industrial (M&I) Use** - This term is used to include municipal and industrial use.

**Private-Domestic Use** - Includes water from private wells or springs for use in individual homes, usually in rural areas not accessible to public water supply systems.

**Residential Use** - Water used for residential cooking; drinking; washing clothes; miscellaneous cleaning; personal grooming and sanitation; irrigation of lawns, gardens, and landscapes; and washing automobiles, driveways, and other outside facilities.

#### A.2.2 Water Supply Terms

Water is supplied by a variety of systems for many uses. Most water supply systems are owned by an irrigation company or a municipality, but in some cases the owner/operator is a private company, or is a state or federal agency. Thus, a "public" water supply may be either publicly or privately owned. Also, systems may supply treated or untreated water.

**Culinary Water Supply** - Water meeting all applicable safe drinking water requirements for residential, commercial and institutional uses. This is also known as potable water.

**Municipal Water Supply** - A supply that provides culinary grade water for residential, commercial, institutional and industrial uses. Municipal, community and city are often used interchangeably.

**Public Water Supply** - Includes culinary water supplied by either privately or publicly owned community systems which serve at least 15 service connections or 25 individuals at least 60 days per year. Water from public supplies may be used for residential, commercial, institutional, and industrial purposes, including irrigation of publicly and privately owned open areas.

**Secondary Water Supply** - Pressurized or open ditch water supplies of untreated water for irrigation of privately or publicly owned lawns, gardens, parks, cemeteries, golf courses and other open areas. These are sometimes called "dual" water systems. They provide water in addition to the culinary supply.

#### A.2.3 Groundwater Terms

**Aquifer** - A saturated body of rock or soil which will yield water to wells or springs

**Groundwater** - Water which is contained in the saturated portions of soil or rock beneath the land surface. Excludes "soil moisture" referring to water held by capillary action in upper unsaturated zones of soil or rock.

**Mining** - Long-term groundwater overdraft in excess of recharge.

**Phreatophyte** - A plant species which extends its roots to the saturated zone under shallow water table conditions and transpires groundwater. These plants are high water users and include such species as tamarisk, greasewood, willows and cattails.

**Recharge** - Water added to the groundwater reservoir or the process of adding water to the groundwater reservoir. Commonly occurs by infiltration of surface water into subsurface storage from precipitation, streamflow or irrigation.

**Recoverable Reserves** - The amount of water which could be reasonably recovered from the groundwater reservoir with existing technology.

**Safe Yield** - In general, it indicates the amount of water which can be withdrawn from an aquifer on a long-term basis without serious quality, environmental or social consequences, or seriously depleting the reservoir.

**Total Water in Storage** - A volume of water derived by estimating the total volume of saturated aquifer and multiplying by the porosity (intergranular space containing water).

#### A.2.4 Other Water Terms

Some water terms are peculiar to the water industry. These are briefly defined in order to better understand the information presented.

**Call** - The ability to order a quantity or flow of water at a given time and for a given period of time.

**Carriage Water** - Water needed for hydraulic operation of a delivery system.

**Drinking Water** - Water used or available for use as a culinary supply. The quality is typically the highest available in the locality.

**Export Water** - A man-made diversion of water from a river system or basin other than by the natural outflow of streams, rivers and groundwater. This is sometimes called a transbasin diversion.

**Instream Flow** - Water flow maintained in a stream for the preservation and propagation of habitat and for aesthetic values.

**Non-Point Source Pollution** - Pollution discharged over a wide land area, not from one specific location. These are forms of diffuse pollution caused by sediment, nutrients etc. carried to lakes and streams by surface runoff.

**Open Water Areas** - Includes lakes, ponds, reservoirs, streams and other areas completely or partially inundated.

**Point Source Pollution** - Pollutants discharged from any identifiable point, including pipes, ditches, channels and containers.

**Potable** - Water suitable for drinking or cooking purposes from both health and aesthetic considerations. The terms culinary and potable are often used interchangeably.

**Reuse** - The reclamation of water diverted from a wastewater conveyance system. The reuse can be either direct or indirect and may or may not be treated to bring it to acceptable standards. This water is recovered from municipal and industrial discharges. Irrigation runoff and hydroelectric power generation return flows are not included.

**Riparian Areas** - Land areas adjacent to rivers, streams, springs, bogs, lakes and ponds. They are ecosystems composed of plant and animal species highly dependent on water.

**Watershed** - The total area of land above a given point on a waterway that contributes runoff water to the flow at that point; a drainage basin or a major subdivision of a drainage basin.

**Wetlands** - Areas where vegetation is associated with open water and wet and/or high water table conditions.

**Water Yield** - Runoff from precipitation that reaches water courses and therefore may be available for use.